# Benefits of Internal living walls

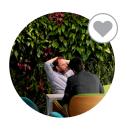
There is overwhelming evidence of the great value of providing plants and indoor Living Walls in offices, places of learning, healthcare facilities, retail spaces and our homes. We typically spend 90% of our time indoors in 'unnatural' environments. We need to enrich the spaces in which we are placing people. This enrichment is good for our health, both physical and mental and also provides demonstrable benefits in terms of, for example, business ROI, learning targets, recovery rates & increased retail potential.





## **Space and Dynamics**

Living walls offer the opportunity to put plenty of plants into offices and other indoor areas without taking up too much premium floor space. The dynamic irrigation system of a living wall creates a healthy vibrant environment as opposed to potted plants that are more passive and static.



### Improved well-being

Studies around the role of plants in the workplace have shown significant reductions in stress and anxiety for employees in the workplace, when surrounded by plants. 37% reported a drop in tension and anxiety, there was a 58% drop in depression and dejection as well as a 38% drop in fatigue. (University of technology Sydney, 2010)

Further studies have found an increase of 15% in productivity when comparing two large commercial offices, one with plants and one without. (University of Exeter, 2014)

It has also been discovered that creativity was also boosted by 15% by plants in the workplace workplace. (Texas A&M University).



### **Better Air**

Measurable Indoor Air Quality (IAQ) is a key indicator of the health and well-being of our indoor spaces. There is considerable scientific evidence as to the ability of plants to improve the air.

- · Plants remove significant quantities of VOCs from the air
- Plants reduce CO² levels by 10 to 25%

At Biotecture we know the right plants to specify to achieve this.



#### **Better Acoustics**

Plants absorb, diffract and reflect sound. The balance varies with the frequency at which the sound is generated and the room's physical properties. The number of plants, the size of the plants and their surface area will all affect its ability to absorb sound.

Biotecture's BioPanel Living Wall System combines the natural benefits of plants with the inherent sound absorbing qualities of the hydroponic Grodan growing medium. As a complete system it has been fully tested and is certified as a class 'C' acoustic material. It can therefore be included as part of the acoustic strategy of a space. The system can therefore perform the roles of both form and function. The test results can be made available on request.

